



Value Desktop Chipsets Comparison Chart

	Intel® 910GL Express Chipset	Intel® 845 Chipset	Intel® 845E Chipset	Intel® 845G Chipset	Intel® 845GL Chipset	Intel® 845GE Chipset	Intel® 845PE Chipset	Intel® 845GV Chipset	Intel® 865G Chipset	Intel® 865P Chipset	Intel® 865PE Chipset	Intel® 848P Chipset	Intel® 865GV Chipset
HOST	910GL Chipset	845 Chipset	845E Chipset	845G Chipset	845GL Chipset	845GE Chipset	845PE Chipset	845GV Chipset	865G Chipset	865P Chipset	865PE Chipset	848P Chipset	865GV Chipset
Target Segment	Value PC	Value PC	Value PC	Value PC	Value PC	Value PC	Value PC	Value PC	Mainstream PC	Mainstream PC	Mainstream PC	Value PC	Mainstream PC
Processor Positioned ?	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4 or Celeron® processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4 or Celeron® processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor	Intel® Pentium® 4, Celeron®, or Celeron® D processor
Hyper-Threading Technology ¹	Optimized for HT Technology	No	Supports HT Technology	Supports HT Technology	No	Supports HT Technology	Supports HT Technology	Supports HT Technology	Optimized for HT Technology	Supports HT Technology	Optimized for HT Technology	Supports HT Technology	Optimized for HT Technology
System Bus	533 MHz	400 MHz	533/400 MHz	533/400 MHz	400 MHz	533/400 MHz	533/400 MHz	533/400 MHz	800/533/400 MHz	533/400 MHz	800/533/400 MHz	800/533/400 MHz	800/533/400 MHz
Processor Package	LGA775, FCPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478	mPGA478
Number Processors	1	1	1	1	1	1	1	1	1	1	1	1	1
MEMORY CONTROLLER HUB	910GL Chipset	845 Chipset	845E Chipset	845G Chipset	845GL Chipset	845GE Chipset	845PE Chipset	845GV Chipset	865G Chipset	865P Chipset	865PE Chipset	848P Chipset	865GV Chipset
MCH Type	82910GL GMCH	82845 MCH	82845E MCH	82845G GMCH	82845GL GMCH	82845GE GMCH	82845PE MCH	82845GV GMCH	82865G GMCH	82865P MCH	82865PE MCH	82848P MCH	82865G GMCH
MCH Package	1210 FC-BGA	593 FC-BGA	593 FC-BGA	760 FC-BGA	760 FC-BGA	760 FC-BGA	760 FC-BGA	760 FC-BGA	932 FC-BGA	932 FC-BGA	932 FC-BGA	932 FC-BGA	932 FC-BGA
MEMORY	910GL Chipset	845 Chipset	845E Chipset	845G Chipset	845GL Chipset	845GE Chipset	845PE Chipset	845GV Chipset	865G Chipset	848P Chipset	865PE Chipset	848P Chipset	865GV Chipset
Memory Modules	1 DIMM/channel, 2 channels	2 DDR or 3 SDR DIMMs	2 DDR DIMMs	2 DDR or 2 SDR DIMMs	2 DDR or 2 SDR DIMMs	2 DDR DIMMs	2 DDR DIMMs	2 DDR or 2 SDR DIMMs	2 DIMMs/2 channel	2 DIMMs/2 channel	2 DIMMs/2 channel	2 DIMMs	2 DIMMs/2 channel

Memory Type	Dual-Channel: DDR 400/333	DDR 266/200, PC133 SDRAM	DDR 266/200	DDR 266/200, PC133 SDRAM	DDR 266/200, PC133 SDRAM	DDR 333/266	DDR 333/266	DDR 333/266/200, PC133 SDRAM	Dual- Channel DDR 400/333/266	Dual- Channel DDR 333/266	Dual- Channel DDR 400/333/266	DDR 400/333/266	Dual- Channel DDR 400/333/266
FSB/Memory Configurations	533/DDR400, 533/DDR333	400/266, 400/200, 400/133	533/266, 533/200, 400/266, 400/200	533/333, 533/266, 400/266	400/266, 400/200, 400/133	533/333, 533/266, 400/266	533/333, 533/266, 400/266	533/333, 533/266, 400/200, 400/133	800/400, 800/333, 533/333, 533/266, 400/266	533/333, 533/266, 400/266, 400/133	800/400, 800/333, 533/333, 533/266, 400/266	800/400, 800/333, 533/333, 533/266, 400/333, 400/266	800/400, 800/333, 533/333, 533/266, 400/266
Max Memory	2 GB	2 GB DDR, 3 GB SDR	2 GB	2 GB	2 GB	2 GB	2 GB	2 GB	4 GB	4 GB	4 GB	2 GB	4 GB
Mbit Support	256 Mbit/512 Mbit/1 Gbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit	512/256/128 Mbit
Error Correction	Non-ECC	ECC/Non- ECC	ECC/Non- ECC	Non-ECC	Non-ECC	Non-ECC	Non-ECC	Non-ECC	Non-ECC	Non-ECC	Non-ECC	Non-ECC	Non-ECC
EXTERNAL GRAPHICS	910GL Chipset	845 Chipset	845E Chipset	845G Chipset	845GL Chipset	845GE Chipset	845PE Chipset	845GV Chipset	865G Chipset	865P Chipset	865PE Chipset	848P Chipset	865GV Chipset
Interface	N/A	AGP4X (1.5V)	AGP4X (1.5V)	AGP4X (1.5V)	N/A	AGP4X (1.5V)	AGP4X (1.5V)	N/A	AGP8X (1.5V)	AGP8X (1.5V)	AGP8X (1.5V)	AGP8X (1.5V)	N/A
INTEGRATED GRAPHICS	910GL Chipset	845 Chipset	845E Chipset	845G Chipset	845GL Chipset	845GE Chipset	845PE Chipset	845GV Chipset	865G Chipset	865P Chipset	865PE Chipset	848P Chipset	865GV Chipset
IG Type	Intel® Graphics Media Accelerator 900	N/A	N/A	Intel® Extreme Graphics	Intel® Extreme Graphics	Intel® Extreme Graphics	N/A	Intel® Extreme Graphics	Intel® Extreme Graphics 2	N/A	N/A	N/A	Intel® Extreme Graphics 2
IG Core Speed	333 MHz	N/A	N/A	266 MHz	266 MHz	266 MHz	N/A	266 MHz	266 MHz	N/A	N/A	N/A	266 MHz
Max <u>Dynamic Video Memory</u>	Dynamic Video Memory Technology (DVMT) 3.0²	N/A	N/A	Dynamic Video Memory Technology (DVMT) 3.0²	64MB ³ if >=256MB RAM, 32MB if 128 to 255MB RAM	64MB ³ if >=256MB RAM, 32MB if 128 to 255MB RAM	N/A	64MB3 if >=256MB RAM, 32MB if 128 to 255MB RAM	96MB6 if >128MB RAM, 32MB if <==128MB RAM	N/A	N/A	N/A	96MB6 if >128MB RAM, 32MB if <==128MB RAM
<u>Zone Rendering</u>	Zone Rendering Technology 3	N/A	N/A	Yes	Yes	Yes	N/A	Yes	Yes	N/A	N/A	N/A	Yes
Video / Display Interface	HDTV and LCD widescreen modes	N/A	N/A	350MHz DAC 2x12bit DVO4	350MHz DAC 2x12bit DVO4	350MHz DAC 2x12bit DVO4	N/A	350MHz DAC 2x12bit DVO4	350MHz DAC 2x12bit DVO4	N/A	N/A	N/A	350MHz DAC 2x12bit DVO4

I/O CONTROLLER HUB	910GL Chipset	845 Chipset	845E Chipset	845G Chipset	845GL Chipset	845GE Chipset	845PE Chipset	845GV Chipset	865G Chipset	865P Chipset	865PE Chipset	848P Chipset	865GV Chipset
ICH Type	Intel® ICH6 Family: , ICH6, ICH6R	ICH2	ICH4	Intel® ICH6 Family: , ICH6, ICH6R	ICH4	ICH4	ICH4	ICH4	ICH5 / ICH5R	ICH5 / ICH5R	ICH5 / ICH5R	ICH5 / ICH5R	ICH5 / ICH5R
ICH Package	609 mBGA	360 EBGA	421 mBGA	421 mBGA	421 mBGA	421 mBGA	421 mBGA	421 mBGA	460 mBGA	460 mBGA	460 mBGA	460 mBGA	460 mBGA
PCI Masters	(4) PCI Express x1	6	6	6	6	6	6	6	6	6	6	6	6
PCI Support	6	PCI 2.2	PCI 2.2	PCI 2.2	PCI 2.2	PCI 2.2	PCI 2.2	PCI 2.2	PCI 2.3	PCI 2.3	PCI 2.3	PCI 2.2	PCI 2.3
IDE	SATA 150/4, UDMA ATA100	ATA/100 IAA5	ATA/100 IAA5	ATA/100 IAA5	ATA/100 IAA5	ATA/100 IAA5	ATA/100 IAA5	ATA/100 IAA5	SATA 150/2	SATA 150/2	SATA 150/2	ATA/100 IAA5	SATA 150/2
Storage Technology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	RAID w/ICH5R	RAID w/ICH5R	RAID w/ICH5R	N/A	RAID w/ICH5R
USB	8 ports, USB 2.0	6 ports, USB 2.0	6 ports, USB 2.0	6 ports, USB 2.0	6 ports, USB 2.0	6 ports, USB 2.0	6 ports, USB 2.0	6 ports, USB 2.0	8 ports, USB 2.0	8 ports, USB 2.0	8 ports, USB 2.0	8 ports, USB 2.0	8 ports, USB 2.0
LAN MAC/PNA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
GbE DEDicated Network Bus	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Yes	Yes	N/A	Yes
AC'97 Digital Circuits	Intel® High Definition Audio, AC'97/20-bit audio	Enhanced 20-bit Audio	Enhanced 20-bit Audio	Intel® High Definition Audio, AC'97/20-bit audio	Enhanced 20-bit Audio	Enhanced 20-bit Audio	Enhanced 20-bit Audio	Enhanced 20-bit Audio	Enhanced 20-bit Audio	AC'97/20-bit audio	AC'97/20-bit audio	AC'97/20-bit audio	Enhanced 20-bit Audio
I/O Management	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO	SMBus 2.0 / GPIO

¹ Hyper-Threading Technology requires a computer system with an Intel® Pentium® 4 Processor supporting Hyper-Threading Technology and a HT Technology enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See <http://www.intel.com/info/hyperthreading> for more information including details on which processors support HT Technology.

² Depends on total system memory, see [Dynamic Video Memory Technology \(DVMT\) 3.0.](#)

³ 64MB of Dynamic Video Memory with [Intel® Extreme Graphics Driver](#), version 11.1 or later.

⁴ DVO = Intel® Digital Video Output Interface enables connection to TV or flat-panel displays.

⁵[Intel® Application Accelerator](#): Accelerates boot time and disk I/O. Performs best on Pentium® 4 processor platforms.

⁶For the Intel® 865G and 865GV Chipsets, 96MB of Dynamic Video Memory with Intel® Extreme Graphics 2 Driver.

Intel® processors, chipsets and graphics products may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.